

What is claimed is:

1. A remote control service processing device in a home network environment, comprising:

an interface for a data exchange between a plurality of types of devices which are designed to respond to a remote control command received through the network;

a storage unit which stores a remote control service list information which represents a function responding to a remote controller of the respective devices connected in the network; and

a control unit which collects the remote control service list information from the respective devices, stores the collected information in the storage unit, and provides a certain device in the network with a remote control service to remote control at least one of the respective devices through a graphic user interface.

2. The remote control service processing device of claim 1, wherein the control unit comprises:

a database server which collects the remote control service list information and manages the collected information; and

a remote control proxy server which provides the certain device with the remote control service in accordance with the remote control service list

information collected through the database server, and upon receiving from the certain device a request for the remote control through the remote control service, reads a remote control command from the database server in accordance with the remote control request, and transmits the remote control command to the corresponding device.

3. The remote control service processing device of claim 2, wherein the database server maps an icon in correspondence with each device.

4. The remote control service processing device of claim 3, wherein the remote control proxy server provides the remote control service so as to enable the certain device to select through the icon a device for remote control.

5. The remote control service processing device of claim 4, wherein the remote control proxy server provides an icon representation selection tool as the remote control service, with which a user can selectively display the icon.

6. The remote control service processing device of claim 5, wherein, when an information regarding the selection of the icon is received from the certain device, the remote control proxy server provides the remote control service so that a remote control service page can be displayed to display the remote control service list of the device corresponding to the icon.

7. The remote control service processing device of claim 2, wherein the remote control proxy server provides the certain device with a remote control service selection item in the form of a list together with other available services.

8. The remote control service processing device of claim 7, wherein, when an information regarding the selection from the remote control service item is received from the service list, the remote control proxy server provides a remote control service setting menu for the user to set functions of the respective devices in the network, and provides a first remote control service page for displaying a remote control service provision menu for the functions of the devices registered through the remote control service setting menu.

9. The remote control service processing device of claim 8, wherein, when an information regarding the selection from the remote control service setting menu is received, the remote control proxy server provides a second remote control service page which matches the function lists of the respective devices with the devices and represents the result.

10. The remote control service processing device of claim 9, wherein, when a control signal is input in accordance with the function selection of the respective devices in a state that the second remote control service page is displayed, the remote control proxy server provides the remote control service so that a function corresponding to the control signal among the remote control service list displayed on the second remote control service page can be represented in marking.

11. The remote control service processing device of claim 10, wherein the remote control proxy server further provides the second remote control service page with a confirm button for confirming the setting completion with respect to the selected function, and

when the confirm button is selected, the database server generates a new identifier with respect to the functions in marking and the respective

devices, matches and registers the functions in marking with the generated identifier.

12. The remote control service processing device of claim 11, wherein the database server registers the identifier as a device identifier.

13. The remote control service processing device of claim 12, wherein, when the remote control service provision menu is selected, the remote control proxy server provides a third remote control service page so that the devices registered in the database server are displayed.

14. The remote control service processing device of claim 13, wherein, when an information regarding a remote control request is received from the certain device to the device which is newly registered with the identifier, the remote control proxy server transmits the remote control command sequentially and at a predetermined time interval to at least one of the respective devices with respect to the functions matched and registered with the identifier.

15. The remote control service processing device of claim 8, wherein, when an information regarding the selection from the remote control service setting menu is received, the remote control proxy server provides a fourth remote control service page to separately display the device corresponding to the control signal in accordance with the function selection of the respective device, and the functions corresponding to the control signal.

16. The remote control service processing device of claim 15, wherein the remote control proxy server further provides a confirm button for confirming the completion of setting with respect to a function selected from the second remote control service page, and

when the confirm button is selected, the database server generates a new identifier with respect to the displayed device and function in accordance with a control signal regarding the selection of device function, and matches and registers said displayed device and function with the generated identifier.

17. The remote control service processing device of claim 16, wherein the database server registers the identifier as a device identifier.

18. The remote control service processing device of claim 17, wherein, when an information is received regarding a remote control request with respect to a device which is newly registered with the identifier, the remote control proxy server transmits the remote control command to at least one of the respective devices sequentially and at a predetermined time interval with respect to the function which is matched and registered with the identifier.

19. The remote control service processing device of claim 18, wherein, when the remote control service provision menu is selected, the remote control proxy server provides the remote control service so that the devices registered through the database server can be displayed.

20. The remote control service processing device of claim 19, wherein the database server maps an icon for each device.

21. The remote control service processing device of claim 20, wherein the remote control proxy server provides the remote control service so that the certain device can select the icon of one of said devices wanted for remote control during the execution of the function of the certain device.

22. The remote control service processing device of claim 21, wherein, when an information regarding the selection of one of said icons is received from the certain device, the remote control proxy server provides a fifth remote control service page so that the device and the function corresponding to the selected icon can be matched with each other and displayed.

23. The remote control service processing device of claim 1, wherein the certain device is a device having a display.

24. The remote control service processing device of claim 23, wherein said remote control service processing device is said certain device.